

IFW/AFS

PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q60831

Toshio KOGA

Appln. No.: 09/688,834

Group Art Unit: 3623

Confirmation No.: 1858

Examiner: M. Irshadullah

Filed: October 17, 2000

For: VEHICLE-ONBOARD ETC APPARATUS

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$500.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: January 31, 2005



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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

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Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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I. REAL PARTY IN INTEREST

The real party in interest is Mitsubishi Denki Kabushiki Kaisha, by virtue of an assignment executed by Toshio Kogo (Appellant hereafter), on July 24, 2000 and recorded by the Assignment Branch of the U. S. Patent and Trademark Office on October 17, 2000 (at Reel 011237, Frame 0513).

II. RELATED APPEALS AND INTERFERENCES

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are no other appeals or interferences before the Board of Appeals and Interferences that will directly affect or be affected by the Board's decision in the instant Appeal.

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III. STATUS OF CLAIMS

Claims 1-7 are pending in the application.

Claims 1-7 are rejected.

The rejection of claims 1-7 is being appealed.

IV. STATUS OF AMENDMENTS

All amendments are believed to have been previously entered and made of record.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 of Appellant's invention recites a vehicle-onboard electronic toll collection apparatus 10A (FIGS. 1 and 3), comprising: vehicle speed detecting means 17 for detecting a speed of a motor vehicle which passes through a toll gate station equipped with an electronic toll collection system (p. 11, line 32 - p. 12, line 20); communication means 3 for exchanging electronic toll collection information for settlement of toll charge/payment transaction with said toll gate station upon passing through said toll gate station (p.2 , line 1 - p. 3, line 23); measuring means 4A for measuring reception field intensity of the received electronic toll collection information within a communication coverage area (p. 12, line 21 - p. 13, line 3); and decision means 4A for making decision on the basis of said detected vehicle speed and said measured reception field intensity as to a location within said communication coverage area where electronic toll collection information communication can be started while sustaining favorable reception field intensity at said detected vehicle speed, to thereby allow said communication means to perform communication processing on the basis of result of said decision (p. 9, lines 4-21; p. 12, line 21 - p. 15, line 23).

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-7 are rejected under 35 U.S.C. § 102(e) as being anticipated by Takikita (US
6,252,524).

VII. ARGUMENT

Argument 1: Takikita fails to teach or suggest a decision means for making a decision on the basis of the detected vehicle speed and the measured reception field intensity as to a location within the communication coverage area where electronic toll collection information communication can be started while sustaining favorable reception field intensity at the detected vehicle speed, to thereby allow the communication means to perform communication processing on the basis of results of the decision.

The Examiner asserts that Takikita discloses all of the features of this limitation of claim 1 in col. 5, lines 15-22, but Appellant respectfully disagrees. Although Takikita discloses a vehicle speed calculation process, this process is performed to calculate a required rate for decelerating the vehicle. In Takakita, the vehicle is decelerated for ensuring the processing time with no relation to the reception field intensity. By contrast, Takikita does not disclose making a decision on the basis of the detected vehicle speed and the measured reception field intensity as to a location within the communication coverage area where electronic toll information communication can be started. Nowhere in the disclosure of Takikita is it taught or suggested that Takikita's system uses detected vehicle speed as a basis for making a decision, as recited in the decision means limitation of claim 1 of the present invention. Although the Examiner has asserted that Takikita discloses this feature of claim 1, the Examiner has not identified any particular portion of the reference which makes this alleged disclosure. For the foregoing reasons, Appellant submits that claim 1 is not anticipated by Takikita.

Claims 2-7 are not anticipated by Takikita, at least because of their dependence from claim 1.

Argument 2: Takikita fails to teach or suggest wherein the decision means is so designed as to sample distance data which ensure more favorable reception field intensity than the reception field intensity at an entrance location of the communication coverage area on the basis of the speed at which the motor vehicle enters the communication coverage area, to thereby generate distance-versus-reception field intensity data.

In the Amendment filed April 20, 2004, Appellant argued that Takikita does not teach or suggest the feature of claim 2 of the decision means being so designed as to sample distance data ... to thereby generate distance-versus-reception field intensity data. In the “Response to Arguments” in the Office Action dated July 29, 2004, the Examiner asserts that the zone comprising length or distance would produce or generate claimed distance-versus-reception field intensity information or data. Essentially, the Examiner appears to be asserting that it would have been inherent for the system disclosed in Takikita to include this feature of claim 2. Appellant respectfully disagrees. Rather, it is not necessarily the case that Takikita generates distance-versus-reception field intensity data. Takikita discloses the detection of signal strength and a toll collection communication zone, but these disclosed features of the reference do not necessarily mean that Takikita generates distance-versus-reception field intensity data.

The Examiner also refers to FIGS. 3 and 4 of Takikita and asserts that the radio wave detector portion 5 of Takikita generates a measure of distance or length. Appellant respectfully disagrees. FIGS. 3 and 4 of the reference simply show the toll collection communication zone, which is defined by the strength of the signal, but not by the distance. The distance itself is not determined. Therefore, Appellant submits that claim 2 and its dependent claims 3-5 are not anticipated by Takikita for this additional reason.

Argument 3: Takikita fails to teach or suggest an image display means for displaying the electronic toll collection information exchanged through the communication means as an image while stopping display of the electronic toll information in dependence on a vehicle speed signal outputted from the vehicle speed detecting means.

Claim 6 of the present application recites an image display means for displaying the electronic toll collection information exchanged through the communication means as an image while stopping display of the electronic toll information in dependence on a vehicle speed signal outputted from the vehicle speed detecting means. In the April 20, 2004 Amendment, Appellant argued that Takikita does not teach or suggest this limitation of the claim. In the “Response to Arguments,” the Examiner refers to col. 8, lines 35-38 and col. 9, lines 12-19 of the reference. However, neither of these excerpts discloses the features claimed in claim 6. As recited in claim 6, the image display means stops display of the electronic toll collection information in dependence on a vehicle speed signal. The Examiner asserts that a user would end or stop displaying information when he is in the communication zone, but a user is not a part of the claim. Rather, it is an image display means which is recited as stopping display of the electronic toll collection information. Furthermore, the stopping of the display of electronic toll collection information is dependent on a vehicle speed signal outputted from the vehicle detecting means, in claim 6 of the present invention. The excerpt recited by the Examiner simply does not disclose the dependent relationship recited in claim 6. For these reasons, Appellant submits that claim 6 is not anticipated by Takikita.


Appellant respectfully requests the members of the Board to reverse the rejection of all appealed claims and to find each of the claims allowable as defining subject matter which is patentable over the applied reference.

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Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CLAIMS APPENDIX

CLAIMS 1-7 ON APPEAL:

1. A vehicle-onboard electronic toll collection apparatus, comprising:

vehicle speed detecting means for detecting a speed of a motor vehicle which passes through a toll gate station equipped with an electronic toll collection system;

communication means for exchanging electronic toll collection information for settlement of toll charge/payment transaction with said toll gate station upon passing through said toll gate station;

measuring means for measuring reception field intensity of the received electronic toll collection information within a communication coverage area; and

decision means for making decision on the basis of said detected vehicle speed and said measured reception field intensity as to a location within said communication coverage area where electronic toll collection information communication can be started while sustaining favorable reception field intensity at said detected vehicle speed, to thereby allow said communication means to perform communication processing on the basis of result of said decision.
2. An vehicle-onboard electronic toll collection apparatus according to claim 1,

wherein said decision means is so designed as to sample distance data which ensure more favorable reception field intensity than the reception field intensity at an entrance location of said communication coverage area on the basis of speed at which said motor vehicle enters said communication coverage area, to thereby generate distance-versus-reception field intensity data.

3. An vehicle-onboard electronic toll collection apparatus according to claim 2, wherein said decision means is so designed as to determine said distance data which can ensure favorable reception field intensity through statistical processing on the basis of speed at which said motor vehicle enters said communication coverage area.

4. An vehicle-onboard electronic toll collection apparatus according to claim 2, wherein said decision means is so designed as to convert the distance data to time data based on area entering speed.

5. An vehicle-onboard electronic toll collection apparatus according to claim 3, wherein said decision means is so designed as to convert the distance data to time data based on area entering speed.

6. An vehicle-onboard electronic toll collection apparatus according to claim 1, further comprising:

image display means for displaying the electronic toll collection information exchanged through said communication means as an image while stopping display of the electronic toll collection information in dependence on a vehicle speed signal outputted from said vehicle speed detecting means.

7. An vehicle-onboard electronic toll collection apparatus according to claim 1, further comprising:

voice output means for generating a synthesized voice message signal for prompting change of speed of the motor vehicle in dependence on a vehicle speed signal outputted from said vehicle speed detecting means, for thereby outputting said message in voice.

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EVIDENCE APPENDIX:

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

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RELATED PROCEEDINGS APPENDIX

There are no related proceedings.